

## RESPIRATORY MEDICATIONS FOR INHALATION AVAILABLE IN CANADA PRODUCTS & DEVICES

**Table 1: Dry Powder Inhalers - Availability and Dose Counter Features**

Drug(s) Generic (Brand Name)	Dose per Inhalation; # of doses	Device type	Dose Counter Features
<b>Bronchodilators</b>			
<b>Short-acting beta<sub>2</sub>-agonist (SABA)</b>			
Salbutamol (Ventolin Diskus®)	200 mcg; 60	Diskus	Dose counter counts down from 60 to 1. The last 5 numbers are in red.
Terbutaline (Bricanyl®)	500 mcg; 100	Turbuhaler	A red mark shows in the window underneath the mouthpiece when 20 doses are left. When the red mark reaches the bottom of the window, the device is empty.
<b>Long-acting beta<sub>2</sub>-agonist (LABA) 12-hour acting</b>			
Formoterol (Foradil®)	12 mcg; 60	Aerolizer	No dose counter (capsule inserted into the device)
Formoterol (Oxeze®)	6 or 12 mcg; 60	Turbuhaler	A red mark shows in the window underneath the mouthpiece when 20 doses are left. When the red mark reaches the bottom of the window.
Salmeterol (Serevent Diskhaler®)	50 mcg; 60	Diskhaler	No (insert disk into the Diskhaler)
Salmeterol (Serevent Diskus®)	50 mcg; 60	Diskus	Dose counter counts down from 60 to 1. The last 5 numbers are in red.
<b>Long acting beta<sub>2</sub>-agonist (LABA) 24-hour acting</b>			
Indacaterol (Onbrez®)	75 mcg; 10 and 30	Breezhaler	No dose counter (capsule inserted into the device)
<b>Long-acting muscarinic antagonist (LAMA) (anticholinergic)</b>			
Acclidinium bromide (Tudorza® Genuair®)	400 mcg; 30 and 60	Genuair	Dose counter counts down by 10 from 60 to zero. A red strip band appears in the dose counter window indicating time to obtain a new inhaler. When preparing the last dose, the actuation button will not return to its upper position.
Glycopyrronium bromide (Seebri® Breezhaler®)	50 mcg; 10 and 30	Breezhaler	No dose counter (capsule inserted into the device)
Tiotropium bromide (Spiriva®)	18 mcg; 10 and 30, 30 refill	Handihaler	No dose counter (capsule inserted into the device)
Umeclidinium bromide (Incruse® Ellipta®)	62.5 mcg; 7 and 30	Ellipta	Dose counter counts down by one; when fewer than 10 doses are left, half of the dose counter shows red (as a reminder to refill prescription). After you have inhaled the last dose, half of the dose counter shows red and the number 0 is displayed. Your inhaler is now empty. If you open the cover after this, the dose counter will change from half red to completely red. . Discard when the dose counter reads "0", or 6 weeks after removal from foil tray, whichever comes first.

<b>Combination products (LAMA/LABA)</b>			
Umeclidinium/vilanterol (Anoro <sup>®</sup> Ellipta <sup>®</sup> )	LAMA/LABA 62.5/ 25 mcg; 7 and 30	Ellipta	Dose counter counts down by one; when fewer than 10 doses remain, half of the dose counter shows red (as a reminder to refill prescription). After you have inhaled the last dose, half of the dose counter shows red and the number 0 is displayed. Your inhaler is now empty. If you open the cover after this, the dose counter will change from half red to completely red. Discard when the dose counter reads "0", or 6 weeks after removal from foil tray, whichever comes first.
Aclidinium/formoterol (Duaklir Genuair <sup>®</sup> )	LAMA/LABA 400/12 mcg; 60	Genuair	Dose counter counts down by 10 from 60 to zero. A red strip band appears in the dose counter window indicating time to obtain a new inhaler. When preparing the last dose, the actuation button will not return to its upper position.
Indacaterol/ glycopyrronium (Ultibro <sup>®</sup> Breezhaler <sup>®</sup> )	LABA/LAMA 110/ 50 mcg; 6 and 30	Breezhaler	No dose counter (capsule inserted into the device)
<b>Inhaled corticosteroids (ICS)</b>			
Budesonide (Pulmicort <sup>®</sup> )	100, 200, or 400 mcg; 200	Turbuhaler	A red mark shows in the window underneath the mouthpiece when 20 doses are left. Discard when the red mark reaches the bottom of the window.
Fluticasone propionate (Flovent Diskus <sup>®</sup> )	100, 250, or 500 mcg; 60	Diskus	Dose counter counts down from 60 to 1. The last 5 numbers are in red.
Fluticasone furoate (Arnuity <sup>®</sup> Ellipta <sup>®</sup> )	100 or 200 mcg; 14 and 30	Ellipta	Dose counter counts down by one; when fewer than 10 doses are left, half of the dose counter shows red, to remind you to refill your prescription. After you have used the last dose, half of the dose counter shows red and the number 0 is displayed. Your inhaler is now empty. If you open the cover after this, the dose counter will change from half red to completely red. Discard when the dose counter reads "0", or 6 weeks after removal from foil tray, whichever comes first.
Mometasone (Asmanex <sup>®</sup> )	100, 200 or 400 mcg; 30 – 100 or 400 mcg 60 - 200 or 400 mcg	Twisthaler	Dose counter counts down by one, indicating number of doses remaining. When counter reaches 00, the cap will lock.
<b>Combination products (ICS/LABA)</b>			
Budesonide/formoterol (Symbicort <sup>®</sup> )	100/6 or 200/6 mcg; 120 - 100/6 mcg 60 & 120 - 200/6 mcg	Turbuhaler	Counts down. Every 20 <sup>th</sup> dose is marked by a number and every 10 <sup>th</sup> dose by a dash. A 0 on a red background in the middle of the window indicates empty.
Fluticasone/salmeterol (Advair Diskus <sup>®</sup> )	100/50, 250/50, or 500/50 mcg; 28 and 60	Diskus	Dose counter counts down from 60 to 1. The last 5 numbers are in red.
Fluticasone furoate/vilanterol (Breo <sup>®</sup> Ellipta <sup>®</sup> )	100/25 or 200/25 mcg; 14 and 30	Ellipta	Dose counter counts down by one; when fewer than 10 doses remain, half of the dose counter shows red to remind you to refill prescription. After you have inhaled the last dose, half of the dose counter shows red and the number 0 is displayed. Your inhaler is now empty. If you open the cover after this, the dose counter will change from half red to completely red. Discard when the dose counter reads "0", or 6 weeks after removal from foil tray, whichever comes first.
<b>Combination products (ICS/LAMA/LABA)</b>			
Fluticasone furoate/umeclidinium/ vilanterol (Trelegy <sup>®</sup> Ellipta <sup>®</sup> )	100/62.5/25 mcg; 14 and 30	Ellipta	As above

**Table 2: Metered Dose Inhalers (MDIs pressurized):  
Availability, Dose Counter Features, and Priming Instructions**

<b>Drug Name (generic &amp; trade)</b>	<b>Dose Counter Feature</b>	<b>Dose per puff; # puffs per device</b>	<b>Initial priming* (releasing spray into the air)</b>	<b>Re-priming* (releasing spray into the air)</b>
<b>Bronchodilators</b>				
<b>Short-acting beta<sub>2</sub>-agonist (SABA)</b>				
Salbutamol Apo-Salvent CFC Free <sup>®</sup>	No dose counter	100 mcg; 200	4 sprays	4 sprays if not used for 2 weeks
Novo-Salbutamol HFA <sup>®</sup>	No dose counter	100 mcg; 200	4 sprays	4 sprays if not used for 4 weeks
Salbutamol HFA (Sanis)	No dose counter	100 mcg; 200	4 sprays	4 sprays if not used for more than 5 days
Ventolin HFA <sup>®</sup>	No dose counter	100 mcg; 200	4 sprays	4 sprays if not used for 4 weeks; 1 puff after cleaning
Salbutamol (in ethanol) Airomir <sup>®</sup>	No dose counter	100 mcg; 200 (or 100 hospital)	4 sprays	4 sprays if not used for 14 days or more
<b>Short-acting muscarinic antagonist (SAMA) (anticholinergic)</b>				
Ipratropium bromide Atrovent HFA <sup>®</sup>	No dose counter	20 mcg; 200	2 sprays	1 spray if not used for more than 3 days
<b>Combination Products (SAMA/SABA)</b>				
Ipratropium/salbutamol Combivent <sup>®</sup> Respimat <sup>®</sup>	Pointer indicates approximate amount remaining	20/100 mcg 60 and 120	Until cloud appears + 3 more times	1 spray if not used for more than 3 days. Full priming if not used for more than 21 days
<b>Long-acting muscarinic antagonist (LAMA) 24-hour acting (anticholinergic)</b>				
Tiotropium Spiriva <sup>®</sup> Respimat <sup>®</sup>	Pointer indicates approximate amount remaining	2.5 mcg; 28 and 60	Until cloud appears + 3 more times	1 spray if not used for more than 7 days. Full priming if not used for more than 21 days
<b>Combination Products (LAMA/LABA)</b>				
Tiotropium/olodaterol Inspirlo <sup>®</sup> Respimat <sup>®</sup>	Pointer indicates approximate amount remaining	2.5/2.5 mcg 28 and 60	Until cloud appears + 3 more times	1 spray if not used for more than 7 days. Full priming if not used for more than 21 days
<b>Inhaled corticosteroids (ICS)</b>				
Beclomethasone (in ethanol) Qvar <sup>®</sup>	No dose counter	50 or 100 mcg; 100 and 200	4 sprays	4 sprays if not used for 14 days or more
Ciclesonide (in ethanol) Alvesco <sup>®</sup>	No dose counter	100 or 200 mcg; 30 and 120	3 sprays	3 sprays if not used for 7 days or more
Fluticasone Flovent HFA <sup>®</sup>	No dose counter	50, 125 or 250 mcg; 60 and 120	1 spray	1 spray if not used for 7 days or more
<b>Combination products (ICS/LABA)</b>				
Fluticasone/salmeterol Advair <sup>®</sup> with dose counter	Dose counter shows # puffs remaining	125/25 or 250/25 mcg; 120	1 spray; repeat until dose counter reads 120	2 sprays if not used for 7 days or more
Mometasone/formoterol (in ethanol) Zenhale <sup>®</sup>	Dose counter shows # puffs remaining	100/5 or 200/5 mcg; 120	4 sprays; dose counter should read 120	4 sprays if not used for 5 days or more

Olodaterol (Striverdi Respimat<sup>®</sup>), a 24-acting LABA is approved by Health Canada, but is not marketed in Canada. Zenhale<sup>®</sup> 50/5 strength is approved, but currently is not marketed in Canada.

**\*Priming a Pressurized MDI:**

Initial priming is recommended before using the inhaler for the first time and re-priming is recommended if the inhaler has not been used for a period of time (as specified in each product's instructions for use). When priming, shake the inhaler and direct the recommended number of test sprays into the air, away from the face.

**Shaking a Pressurized MDI before Use:**

Shake all pressurized MDIs before use except QVAR<sup>®</sup> and Respimat<sup>®</sup> products. QVAR<sup>®</sup> is formulated as a solution in HFA propellant. Respimat<sup>®</sup> products are formulated as propellant-free solutions.